

Serial No. 10/038,725

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A broadcast receiving system comprising:
 - a high frequency amplifier circuit which receives and amplifies a broadcasting radio wave corresponding to a desired frequency and which provides an amplified output;
 - a local oscillator circuit which produces and outputs in a PLL circuit a local oscillation signal having a local oscillation frequency corresponding to the desired frequency of the broadcasting radio wave;
 - a mixing circuit which mixes the output provided from the high frequency amplifier circuit with the local oscillation signal provided from the local oscillator circuit to make conversion into an intermediate frequency signal and which outputs the intermediate frequency signal;
 - a variable filter circuit which allows the intermediate frequency signal to pass therethrough, the variable filter circuit having a band-pass filter circuit which limits the frequency band of the signal passing therethrough and a switching circuit capable of switching whether the intermediate frequency signal outputted from the mixing circuit is to pass through or bypass the band-pass filter;

Serial No. 10/038,725

an SAW filter which allows the intermediate frequency signal having passed through the variable filter circuit to

pass therethrough;

an intermediate frequency amplifier circuit for intermediate frequency amplification of the intermediate frequency signal having passed through the SAW filter;

a VCO circuit which generates an oscillation signal and which can change the oscillation frequency of the oscillation signal;

a detector circuit which, on the basis of the oscillation frequency of the oscillation signal, detects the intermediate frequency signal amplified by the intermediate frequency amplifier circuit and which outputs a video signal and an audio signal; and

a microcomputer which, when receiving a broadcasting radio wave in voice FM broadcast, makes control for causing the switching circuit to switch over to the side where the intermediate frequency signal is allowed to pass through the band-pass filter circuit and for causing the VCO circuit to change the oscillation frequency of the oscillation signal into an oscillation frequency corresponding to the broadcasting radio wave in the voice FM broadcast, wherein the variable filter means is provided with a band-pass filter circuit which limits the frequency band of a signal passing therethrough and a switching circuit capable of switching whether the intermediate frequency signal is to pass through or bypass the band-pass filter circuit; and

~~the control means makes control to let the switching circuit switch whether the intermediate frequency signal is to pass through or bypass the band-~~

Serial No. 10/038,725

~~pass filter circuit, in accordance with the type of the received broadcasting radio wave.~~

2. (Original) A broadcast receiving system according to claim 1, wherein: the high frequency amplifier circuit, the local oscillator circuit, the mixing circuit, and the variable filter circuit are provided in a tuner IC which is connected to the microcomputer;

the intermediate frequency amplifier circuit, the detector circuit, and the VCO circuit are provided in a chroma IC which is connected not only to the microcomputer but also to the tuner IC through an SAW filter;

a crystal oscillator circuit which generates a reference oscillation signal of a predetermined oscillation frequency and which amplifies and outputs the reference oscillation signal through an emitter follower circuit, and a series resonance circuit connected to the crystal oscillator circuit and having a resonance frequency nearly equal to the predetermined oscillation frequency of the reference oscillation signal, are provided;

the VCO circuit produces the oscillation signal in accordance with the reference oscillation signal outputted from the crystal oscillator circuit; and

the local oscillator circuit acquires the reference oscillation signal through the series resonance circuit and produces the local oscillation signal in accordance with the reference oscillation signal.

Serial No. 10/038,725

3. (Currently Amended) A broadcast receiving system comprising:

a tuner means which receives a broadcasting radio wave corresponding to a desired frequency and which converts it into an intermediate frequency signal and outputs the intermediate frequency signal;

a variable filter means which allows the intermediate frequency signal outputted from the tuner means to pass therethrough and which can change a limitation on the frequency band of the intermediate frequency signal passing therethrough;

a variable oscillator means which generates an oscillation signal and which can change the oscillation frequency of the oscillation signal;

an amplifier/detector means which, in accordance with the oscillation frequency of the oscillation signal, subjects the intermediate frequency signal having passed through the variable filter means to intermediate frequency amplification and detection and which outputs a video signal and an audio signal; and

a control means which, in accordance with the type of the received broadcasting radio wave, makes control to let the variable filter means limit the frequency band of the intermediate frequency signal passing therethrough and let the variable oscillator means change the oscillation frequency of the oscillation signal, wherein the variable filter means is provided with a band-pass filter circuit which limits the frequency band of a signal passing therethrough and a switching circuit capable of switching whether the intermediate frequency signal is to pass through or bypass the band-pass filter circuit; and

Serial No. 10/038,725

the control means makes control to let the switching circuit switch whether the intermediate frequency signal is to pass through or bypass the band-pass filter circuit, in accordance with the type of the received broadcasting radio wave.

4. (Original) A broadcast receiving system according to claim 3, wherein:

when receiving a broadcasting radio wave in voice FM broadcast, the control means makes control to let the variable filter means limit the frequency band and let the variable oscillator means change the oscillation frequency of the oscillation signal into an oscillation frequency corresponding to the broadcasting radio wave in voice FM broadcast.

5. (Cancelled)

6. (Previously Amended) A broadcast receiving system according to claim 3, wherein:

when receiving a broadcasting radio wave in voice FM broadcast, the control means makes control to let the switching circuit switch the intermediate frequency signal to the side where the signal is allowed to pass through the band-pass filter circuit.

7. (Original) A broadcast receiving system according to claim 3, wherein:

the tuner means is provided with a local oscillator means which produces and outputs in a PLL circuit a local oscillation signal of a local

Serial No. 10/038,725

oscillation frequency corresponding to a desired frequency of the broadcasting radio wave and is also provided with a mixing circuit which amplifies the inputted broadcasting radio wave and which mixes the thus-amplified signal with the local oscillation signal outputted from the local oscillator means to

BEST AVAILABLE COPY